



From SD-WAN to SASE: Delivering the capabilities for a changing workforce

Connect, Control, Converge

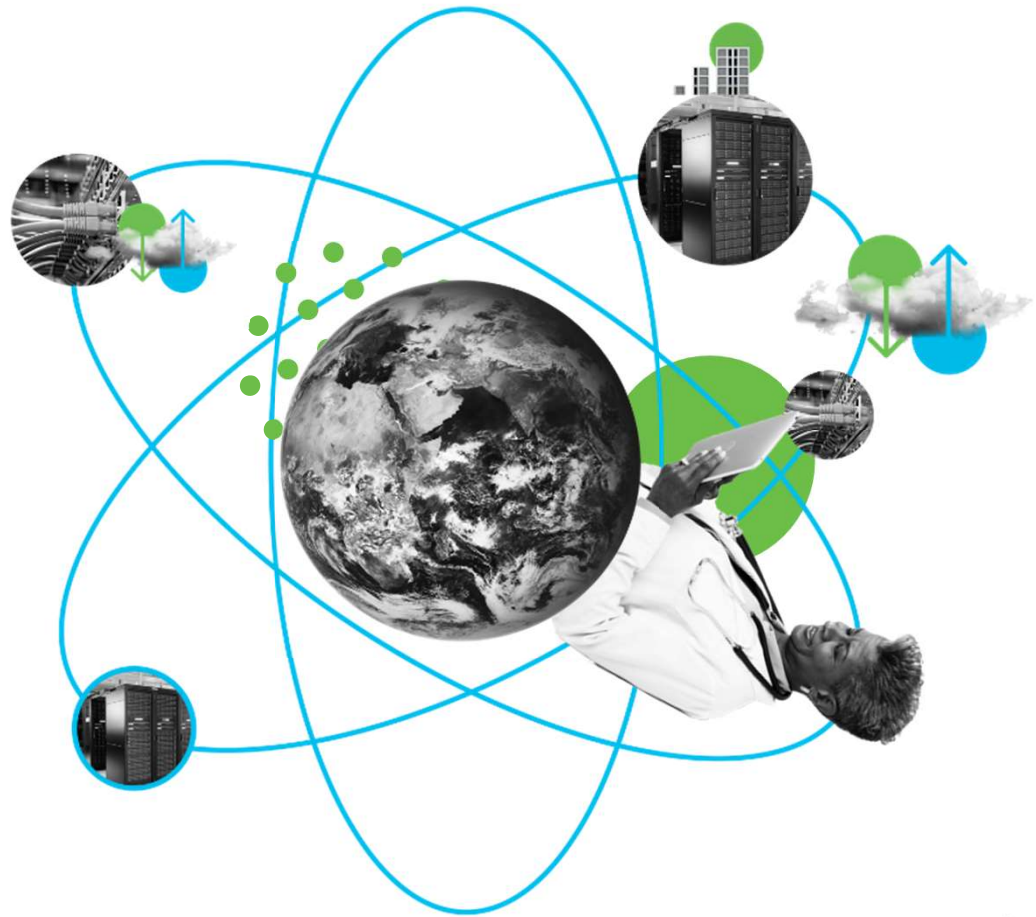
Chris Anderson, Rusty Pesselato
Technical Solution Architects - Sales
December 16, 2020

The demand for anywhere, anytime access has accelerated

- Users are dispersed – home, branch, and more
- Connecting in different ways
- Expecting seamless access to applications



Applications and data now reside everywhere



Increasing complexity and exposure to risk

It is challenging for networking and security to...



...adapt to constantly shifting threat vectors



...connect and protect users at the edge



...work together efficiently

Enter SASE

Get back in the driver's seat with *Secure Access Secure Edge*

“SASE enables companies to operate during times of disruption and provides highly secure, high-performance access to any application, regardless of user location.”

Gartner's Initial Secure Access Service Edge Forecast
Joe Skorupa, Nat Smith 2020
-- Gartner

Gartner: Secure Access Service Edge (SASE)

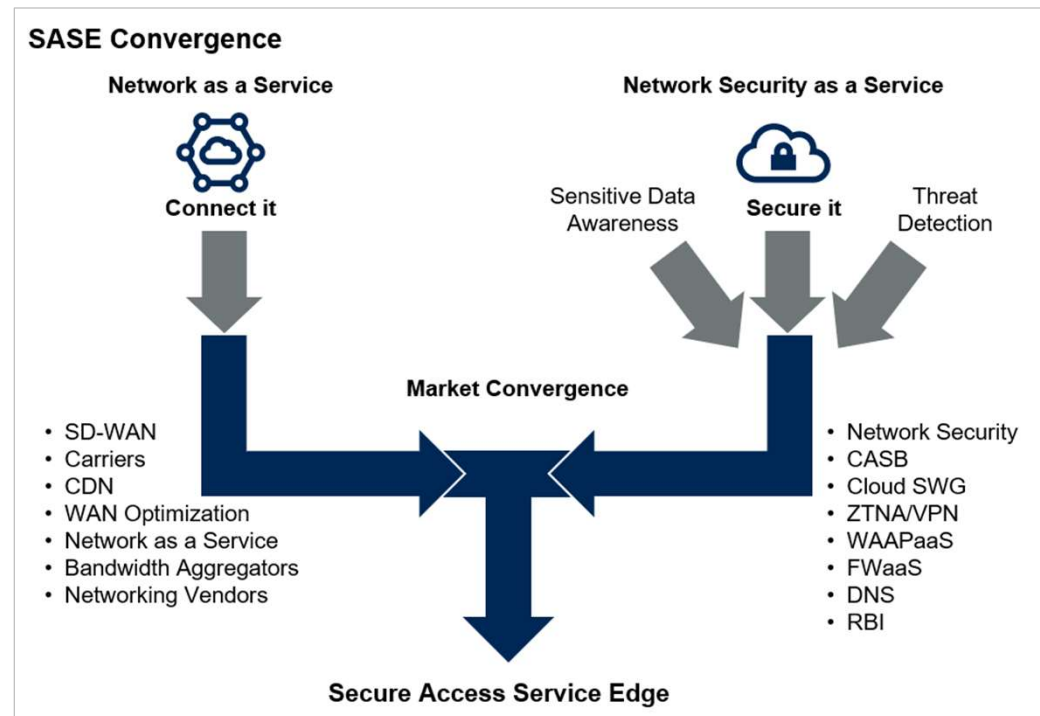
Convergence of networking and security services including SWG, CASB, DNS protection, firewall-as-a-service, SD-WAN, and zero trust network access

Benefit rating:
Transformational

Market penetration:
Less than 1% of target audience

Maturity:
Emerging

Gartner, The Future of Network Security
Is in the Cloud, Neil MacDonald, Aug 30, 2019

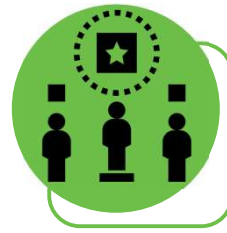


SASE in Managed Services

Differentiation of your solutions



Greatest investment protection



Outstanding revenue & profit potential

Integrated security everywhere.
Secure, predictable user experience on any cloud.

Key Reasons for Managed SASE

The more distributed, the more value in outsourcing the network deployment, management, and security.



Reducing Risk



Improve Time to Deployment and Scalability



Streamlining the Process



Ensuring Success



Realizing a SASE framework requires a long-term vision for consolidation



The three C's for SASE

Connect



Control



Converge

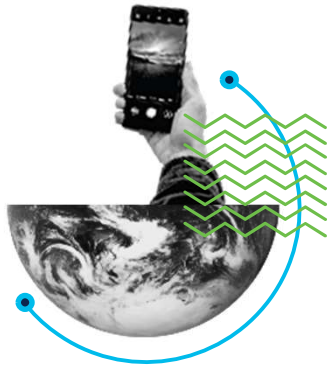


Transform the way you connect

Unleash your workforce by delivering a seamless connection to applications in any environment from any location



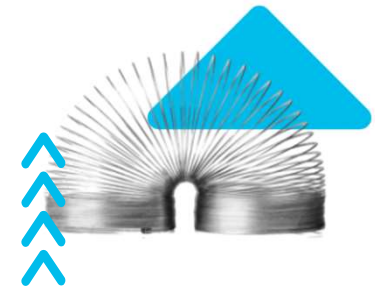
Drive connectivity from any location on any device



Frictionless connectivity
everywhere



Zero-touch
provisioning

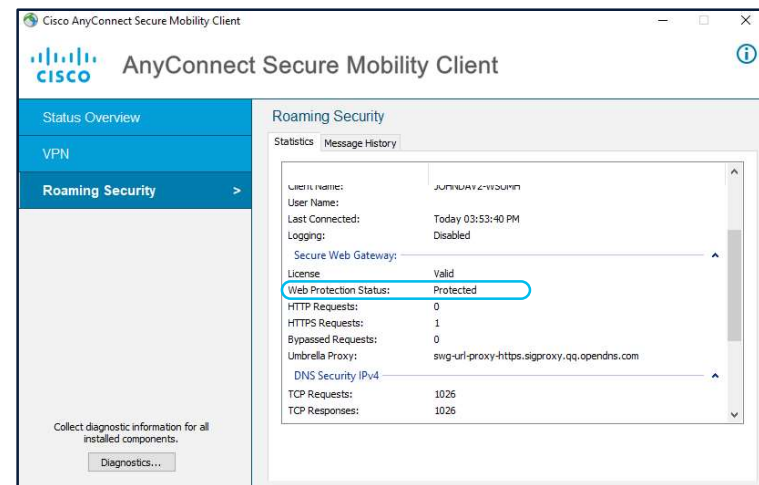


Simple to manage
and scale

AnyConnect

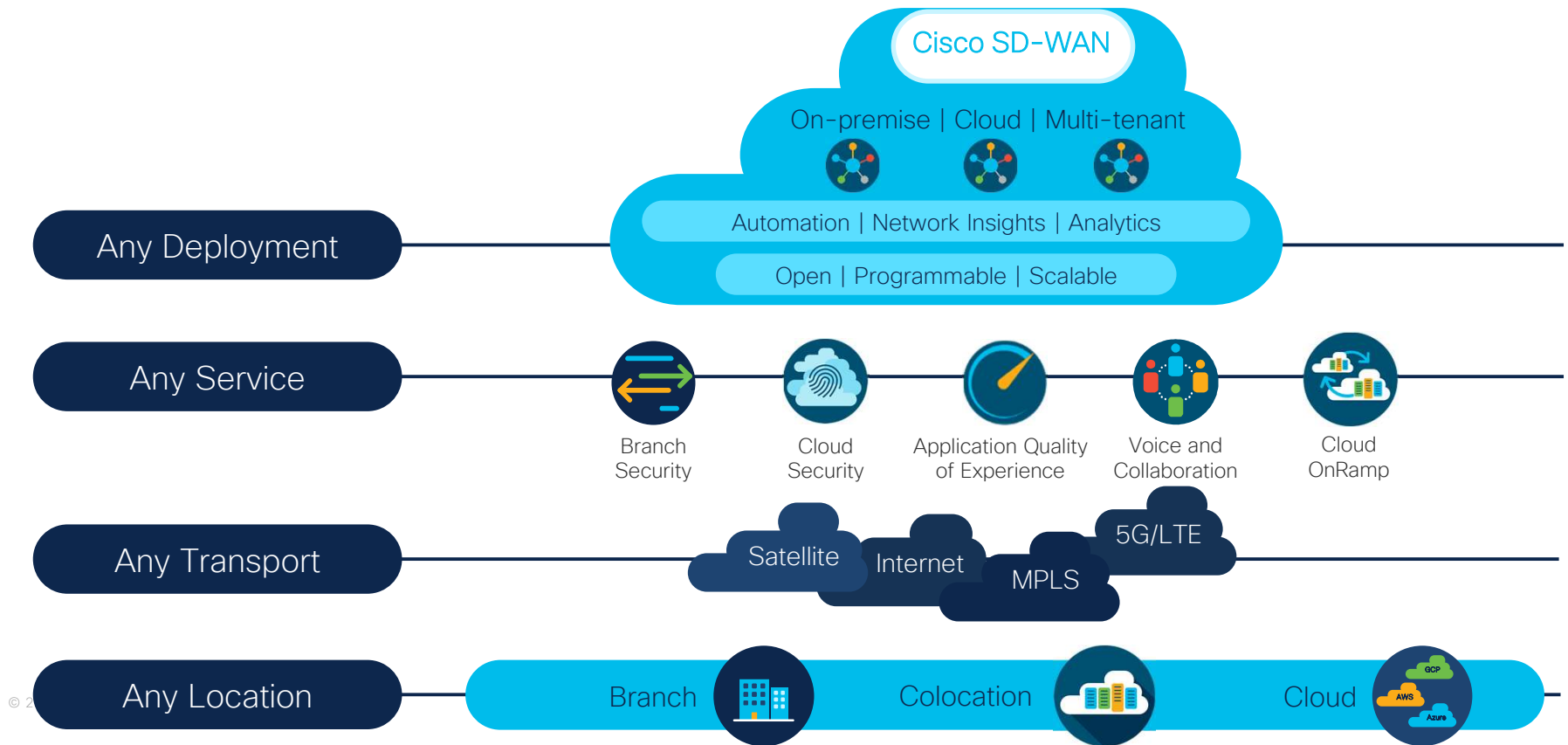
(AC Plus) Entitlement for AnyConnect is included with SIG Essentials

- AnyConnect can be used across an entire enterprise
- Both Umbrella DNS and Secure Web Gateway services can co-exist
- Protect assets on or off network
- Simple and consistent user attribution



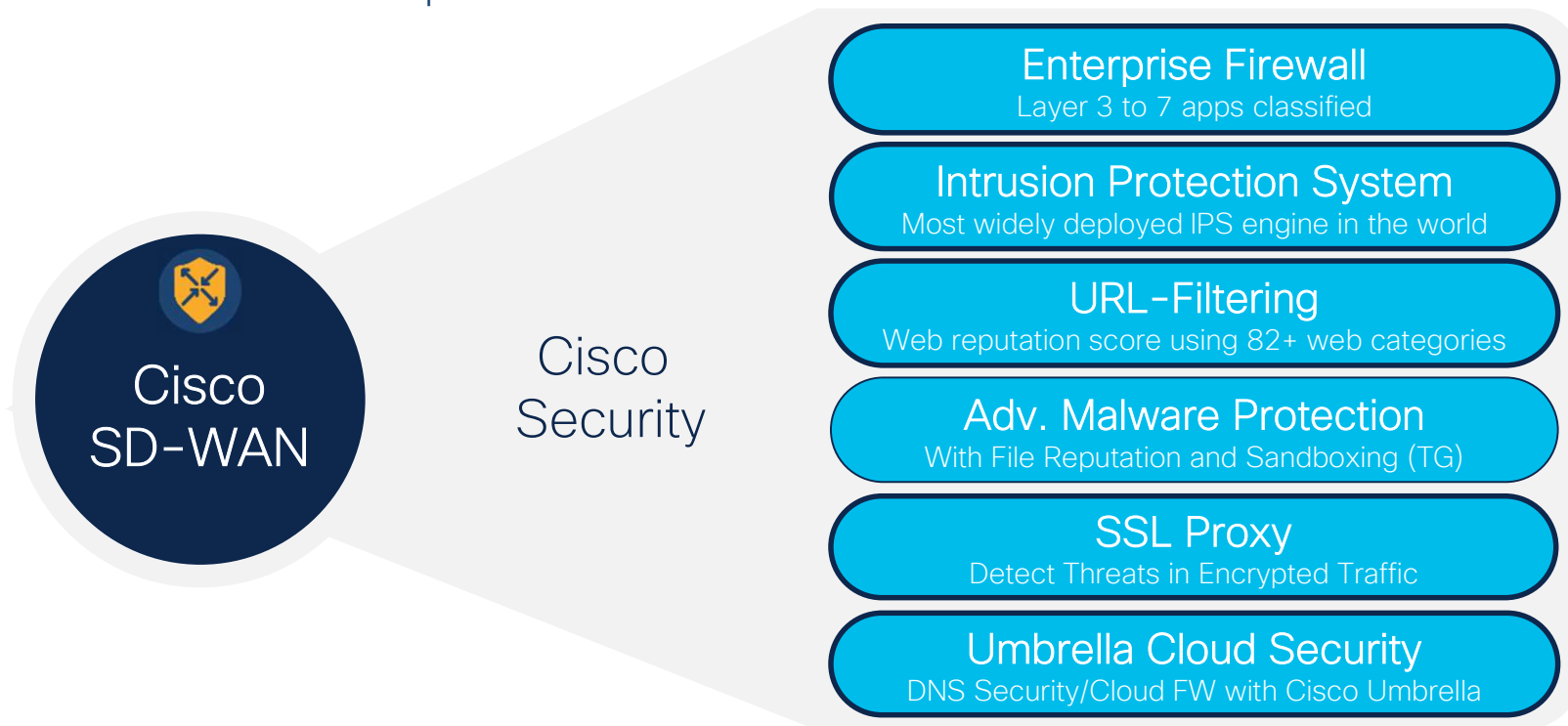
Supports Windows and Mac desktops

Secure Cloud Scale SD-WAN Architecture

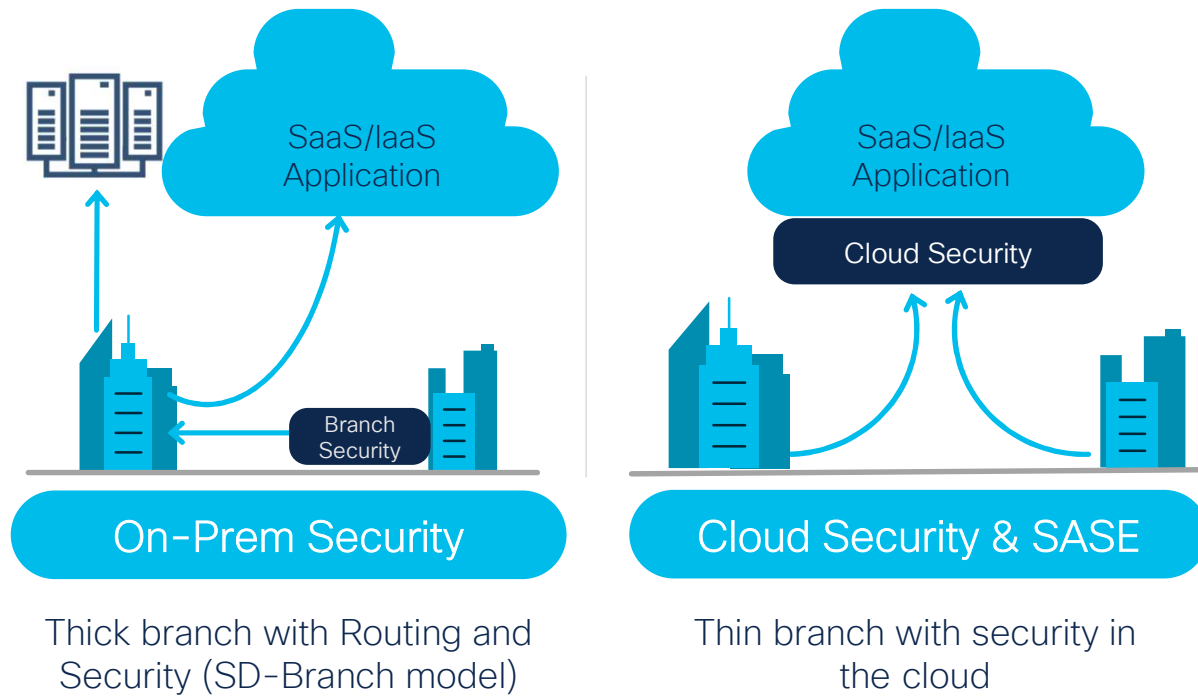


Cisco SD-WAN Security & SASE Solution

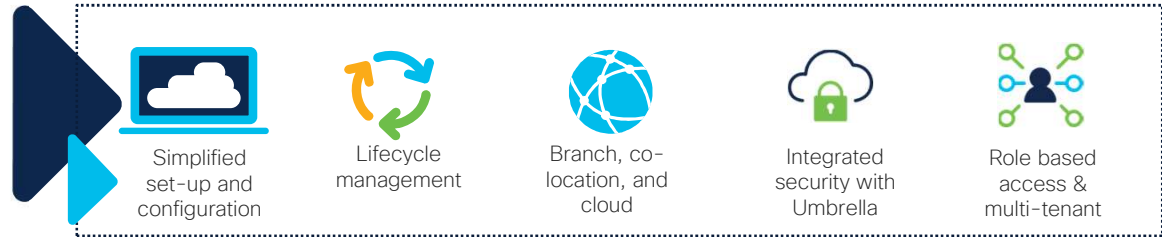
Consistent across on-prem and cloud



Control Your Journey to SASE



Streamline Control with vManage



Centralized control for branch, cloud, co-location, and security

Simplified configuration for OnRamp, security, devices, policies & templates

Security throughout your network architecture with pre-built integrations

Benefits of Cisco SD-WAN

Predictable app experience



Support for evolving business application strategy

Cloud OnRamp for IaaS, SaaS and Colocation

Right security, right place



Secure segmentation across entire network stack

Full edge security stack from branch to cloud and colocations

Enterprise grade, simplified

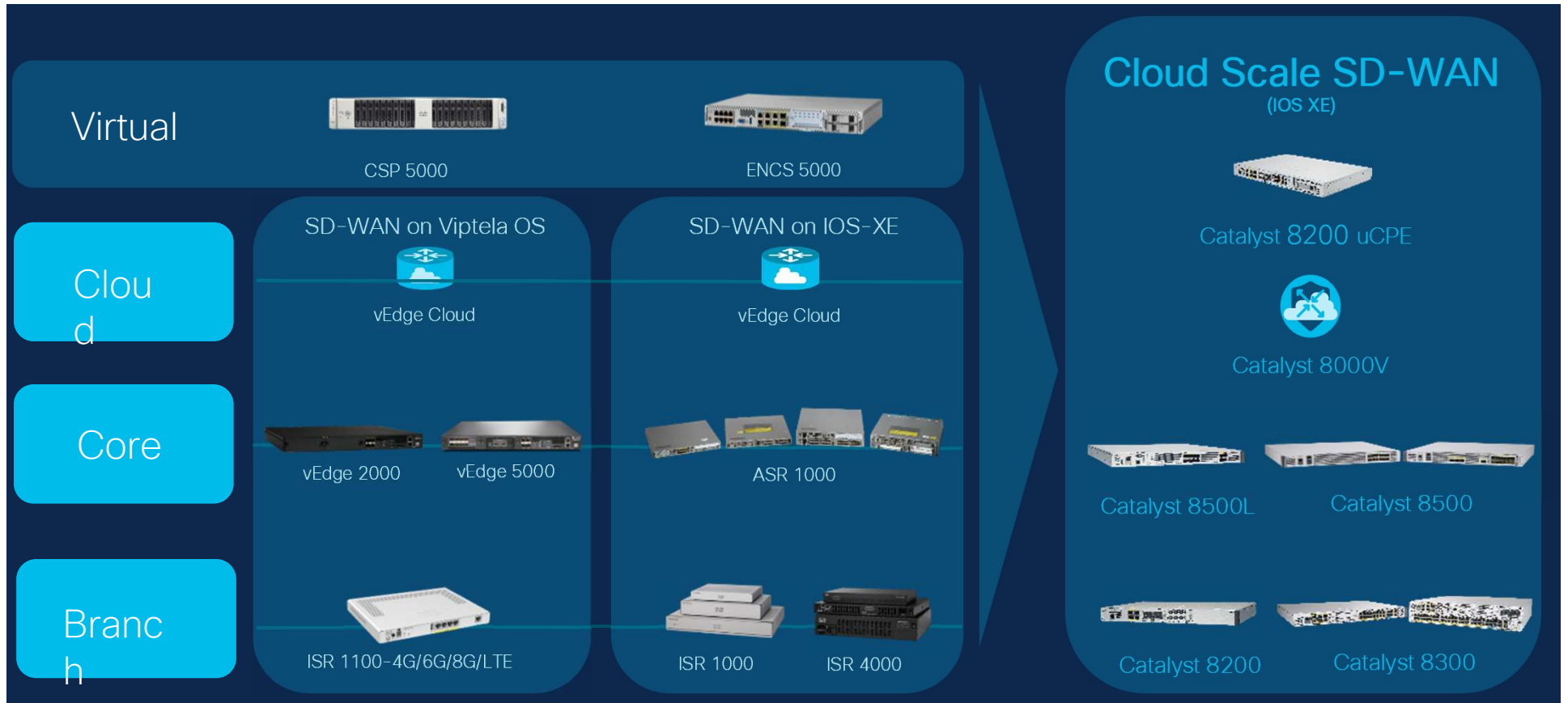


Intent-based networking with multi-domain policy

Proven deployments to over 10,000+ sites

One user interface for security and SD-WAN across branch, cloud, and colocation

SD-WAN Platforms for Any Deployment



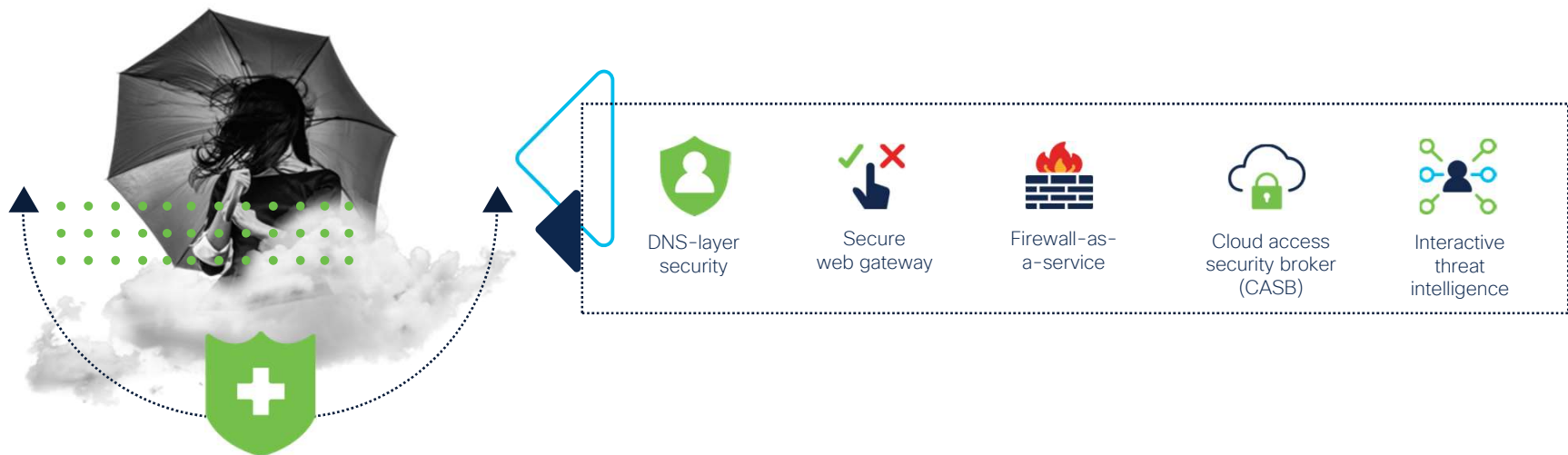
Gain more control

Simplify the setup, management, and control of your network with a single management dashboard for branch, cloud, co-location, and security



Streamline security operations in the cloud

Speed time to value with an integrated and open platform



Combine multiple security functions into one simple to use, cloud-native service

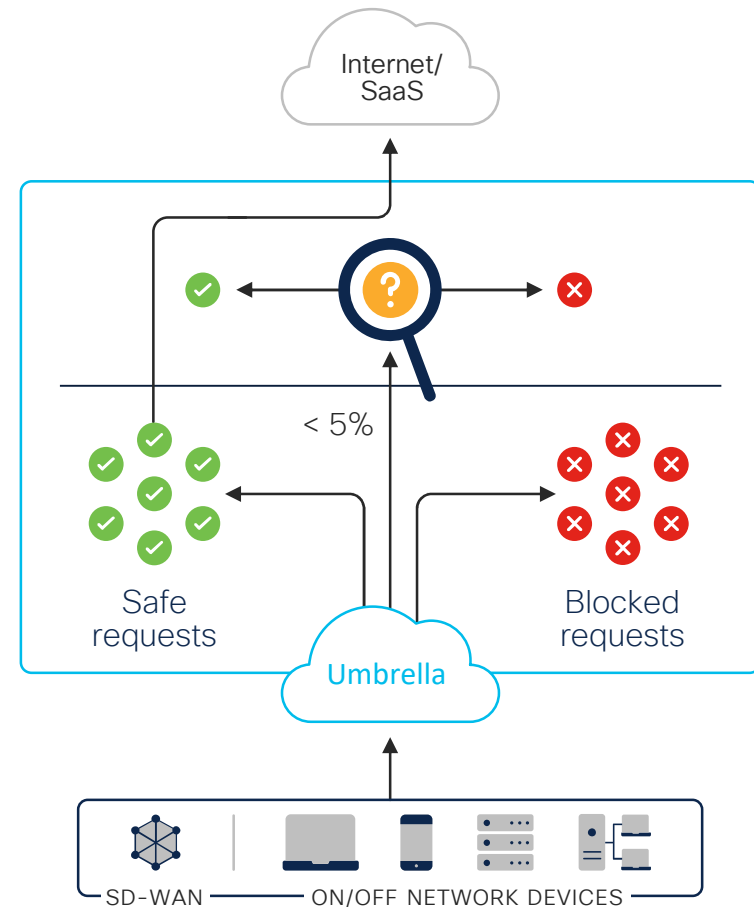
Block more threats earlier with a first line of defense at the DNS layer

Infuse security throughout your network architecture with pre-built integrations

DNS-layer security

First line of defense

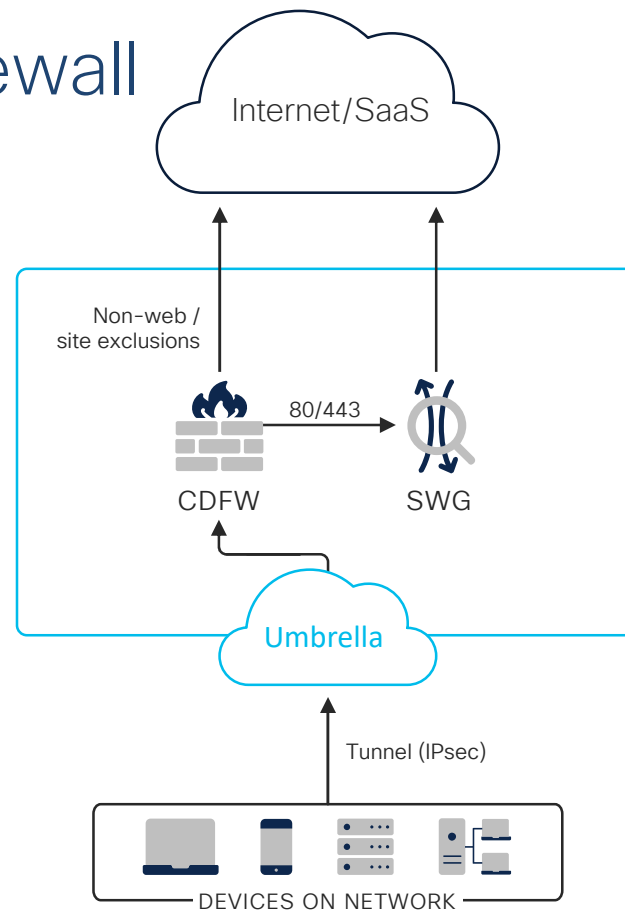
- Deploy enterprise wide in minutes
- Block domains associated with malware, phishing, command and control callbacks anywhere
- Stop threats at the earliest point and contain malware if already inside
- Accelerate threat response with an integrated security platform
- Amazing user experience – faster internet access; only proxy risky domains



Umbrella cloud-delivered firewall

Layer 7 application visibility and control

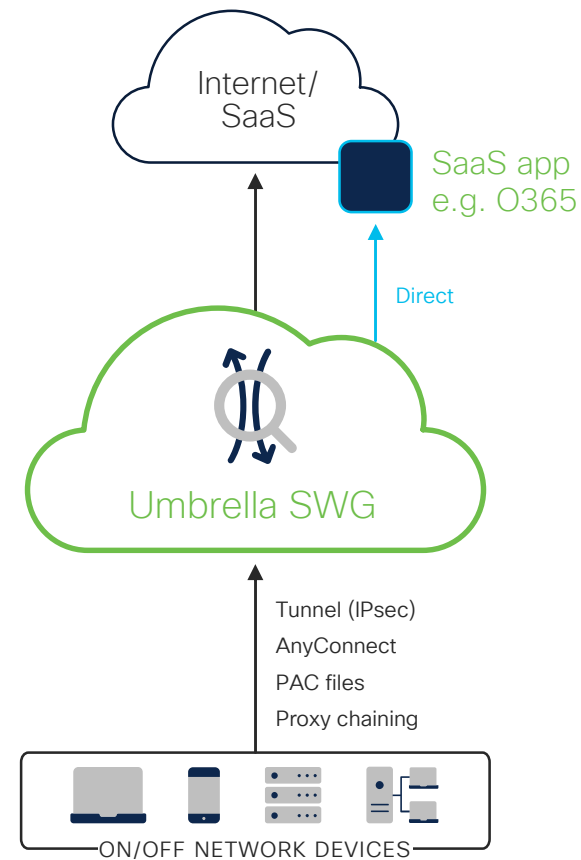
- Tunnel all outbound traffic to Umbrella
- Block high risk, non-web applications and protocols (layer 7 application visibility & control)
- Centrally manage IP, port, protocol and application rules (layer 3, 4 and 7)
- Forward web traffic (ports 80/443) to secure web gateway
- IPsec tunnel termination



Umbrella SWG

Multiple functions and aggregated reporting in one cloud console

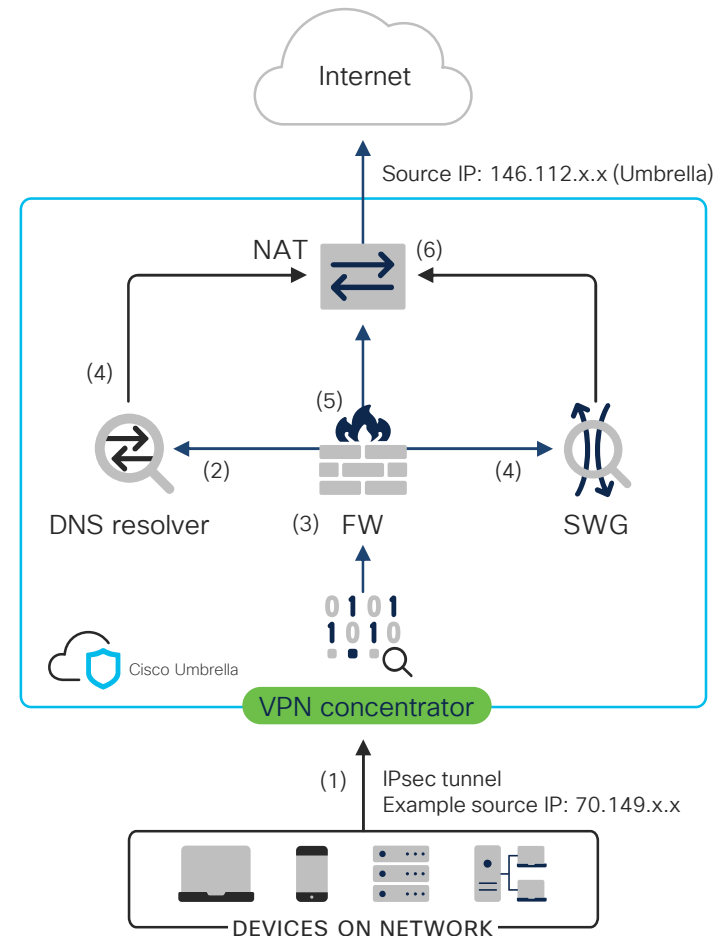
- Anti-virus and AMP malware scanning
- File type controls
- Full or selective SSL decryption
- Category or URL filtering for content control
- Threat Grid file sandboxing
- App visibility and granular controls
- Full URL level reporting



Application flow tunnel and full services

DNS, SWG, and CDFW rules

1. Forward traffic via IPSEC tunnel to the cloud
2. Resolve Umbrella DNS security per policy, allow or block. Traffic is logged.
3. Traffic inspected in CDFW. If Web traffic allowed over 80/443, it's sent to SWG (4). All other traffic inspected by firewall (goes to 5). Traffic is logged.
4. SWG does its policy inspection. Traffic is logged.
5. 'Allowed' traffic egresses through NAT



Cisco Secure CASB types

Out of band/API

Cloudlock

- User behavior monitoring/alerts
- Cloud storage policy enforcement
- DLP quarantine and revocation actions
- OAuth apps: visibility & control

Umbrella

- Data-at-rest cloud malware detection (LA)

Inline/proxy

Umbrella

- App visibility & blocking
- Advanced app control
 - Block uploads (i.e. Dropbox/Box)
 - Block attachments (i.e. webmail)
- Tenant controls
- Inline DLP (field trials)

Scale confidently with a leader in cloud-native security



250B
requests per day



500M
authentication events
every month



500K
customers



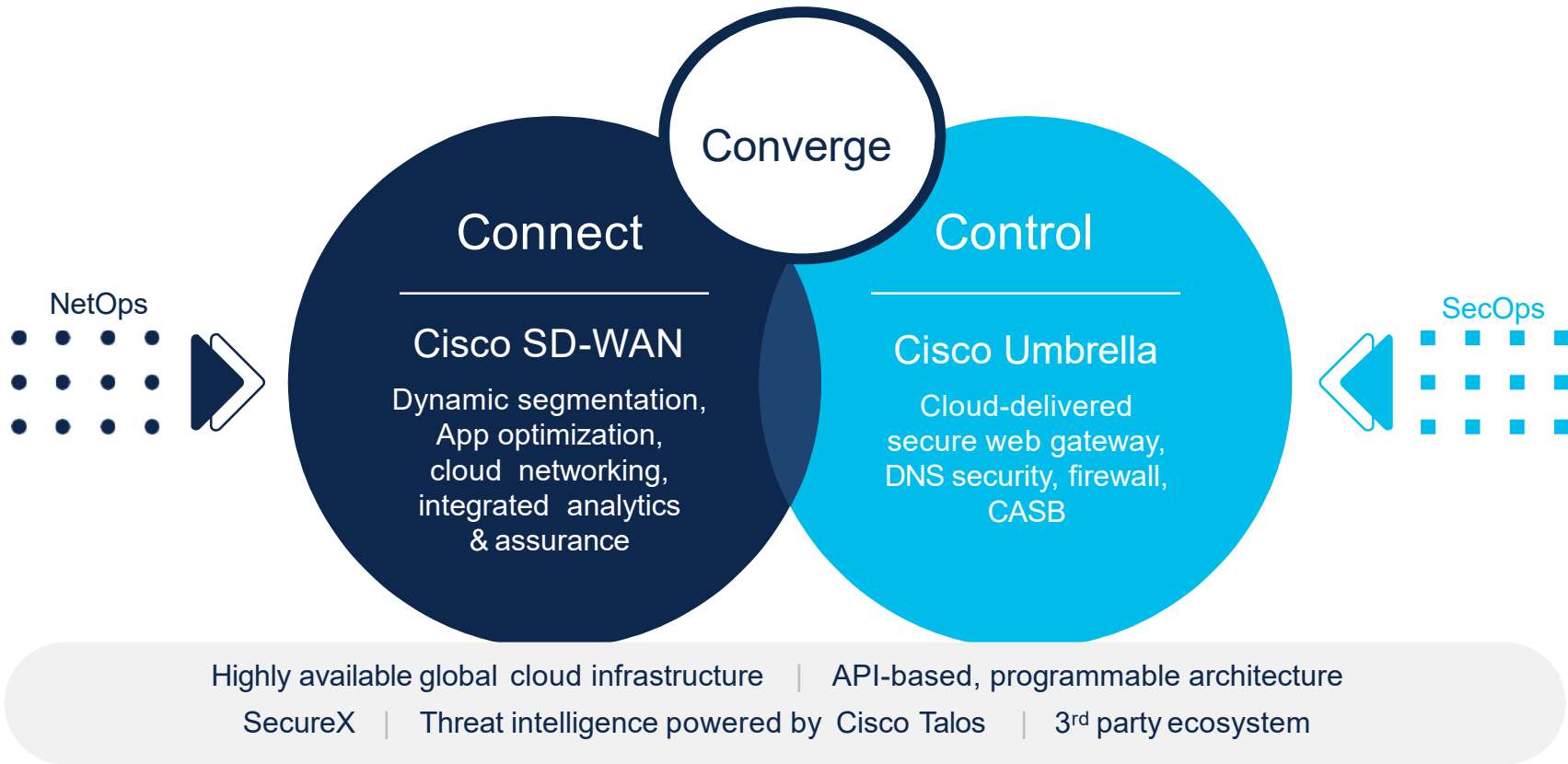
100%
uptime since 2006 with global
PoPs on six continents

Converge where it matters

Unite security and networking through a flexible, integrated approach that meets multi-cloud demands at scale.



Networking and Cloud Security Convergence



Streamlining Networking and Security

- **Automation:** Fast deploy cloud security across thousands of branches in minutes
- **Top notch protection:** defend against threats at the branch with leading real-time threat intelligence
- **Centralized management:** single pane of glass across all offices and users with vManage
- **Easy to consume:** Consistent packaging and entitlement reporting. Simplified billing with enterprise agreement

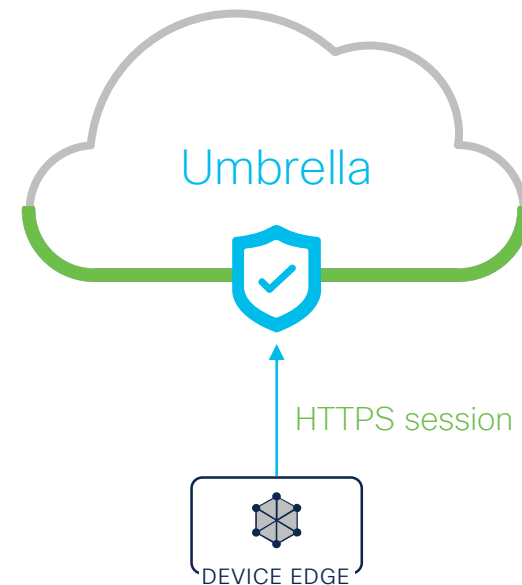


Rapid onboarding: accelerates security and ROI

Umbrella for Cisco SD-WAN

Deploying Secure SD-WAN now takes minutes not months:

- SD-WAN Edge devices are automatically registered to Umbrella
- No need to manually enter API keys
- Secure API key is automatically provisioned on the edge device via an HTTPS session

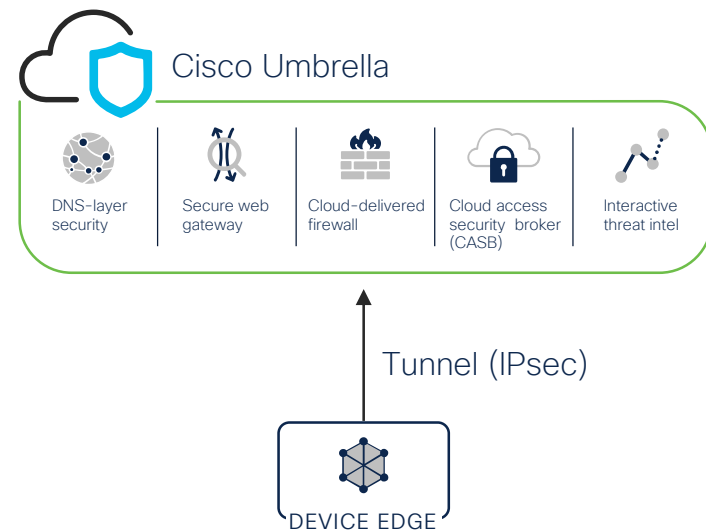


New DNA-Premier package

Automated IPsec tunnel creation

Umbrella for Cisco SD-WAN

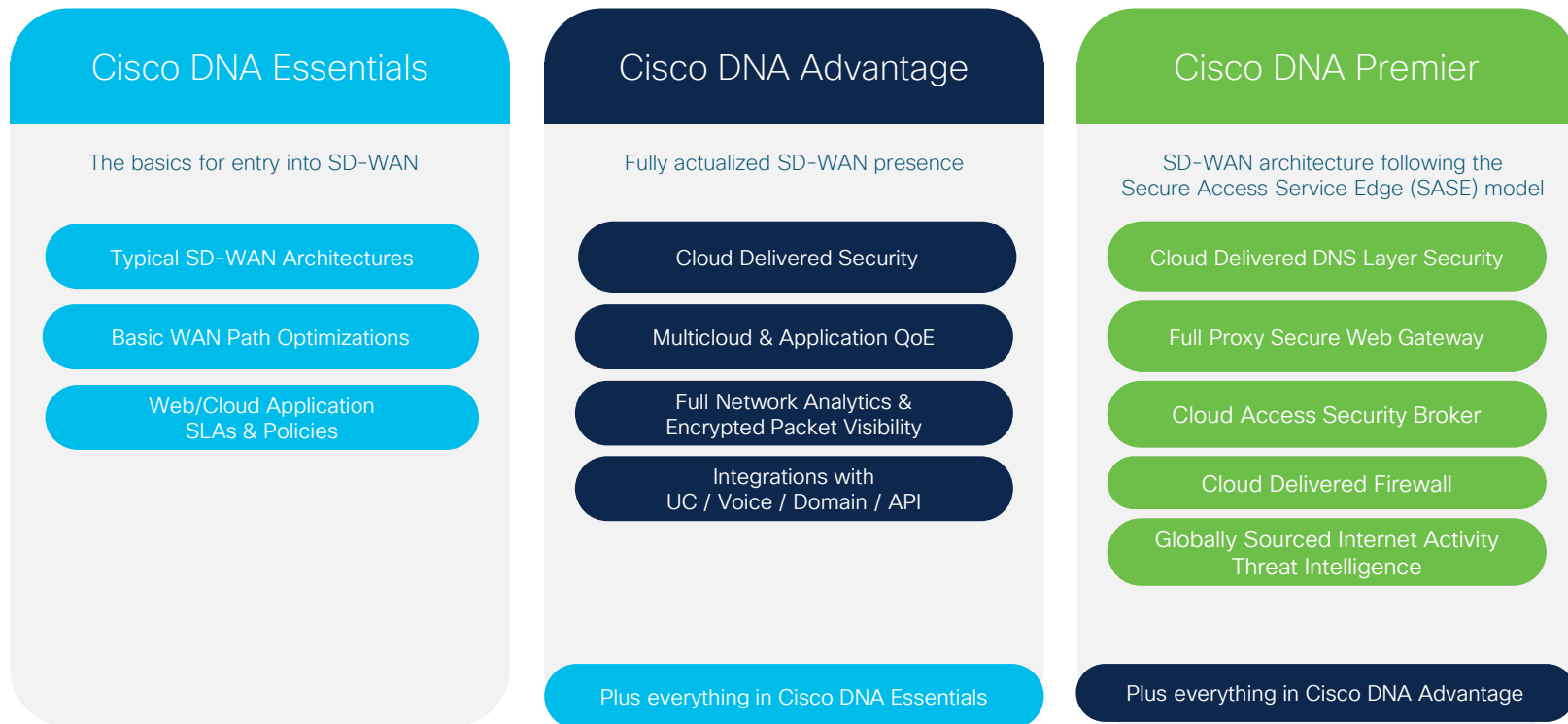
- By pushing the SIG feature template, a customer can now setup an IPsec tunnel to Umbrella SIG
- Without this solution, a customer would need to manually establish the tunnel for each WAN Edge device at branch



With this feature, SD-WAN will have much deeper integration with Umbrella

Cisco DNA SD-WAN Licensing

Simplified Use Case Based Packaging



Cisco SD-WAN Security

Connect any user to any application with centralized control for the ultimate convergence of networking and cloud security – all on a SASE-enabled architecture



Tamimi Markets Leads with Cisco SASE Architecture

Industry: Retail
Region: EMEAR

*“With Cisco SD-WAN, we’ve **reduced our MPLS spending by 25%** while increasing bandwidth by
“There are lots of benefits with Cisco SD-WAN—my network team is so happy with it. Now, they focus on
critical tasks rather than being burdened with maintenance and updates. And the performance
improvements have **dropped service ticket queues to nearly zero.**”
— Joel Marquez, IT Director, Tamimi Markets*

Challenge

- Poor cloud connectivity performance through a legacy hub-and-spoke architecture
- Significant ISP price hikes when additional bandwidth was needed
- Inability to secure distributed traffic across DIA-enabled branches and remote workers
- Sluggish business processes due to inflexible communications infrastructure

Solution

- Cisco SD-WAN powered by Viptela
- Cisco Umbrella
- Cisco DNA Advantage
- Cisco vEdge 100

Result

- True branch independence through Direct Internet Access (DIA) resulting in 4X bandwidth
- Secure SD-WAN protect all employees and devices, anywhere they connect to the internet
- In 2018 alone, reduced MPLS spending by 25% - a net savings of nearly \$450,000
- Greater link selection and cost control through dynamic traffic steering and internet service provider options
- Flexibility through Cisco’s trustworthy SD-WAN infrastructure

Global SD-WAN Market Leader

2020

Gartner WAN Edge Infrastructure Magic Quadrant Leader

30K

Global Deployment Largest Install Base

70%

Fortune 100 Deployed

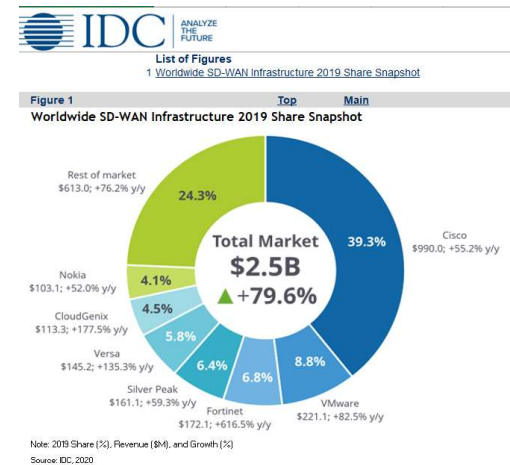
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#1

Market share IDC, Dell 'Oro, Gartner

SAS

Cisco SASE Winner CRN 2020 Tech Innovators Award



Proven networking and security leader



Protect 100% of the Fortune 100



#1 in cybersecurity market share



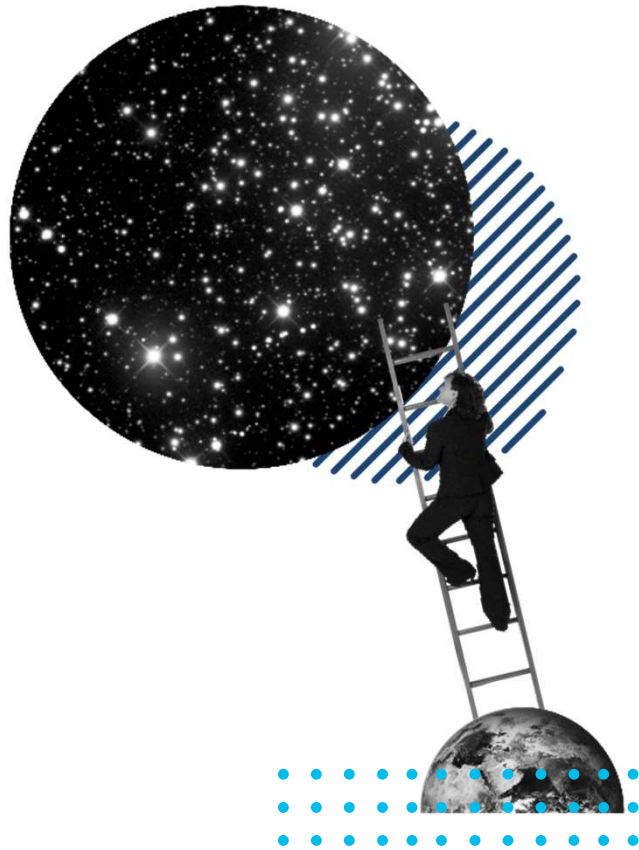
\$1B in cloud-native investments



3x larger partner ecosystem than competitors

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Our vision: An end-to-end secure network connectivity experience all as a service

Who else would you trust to drive your network revolution?

Why Cisco SD-WAN?

Predictable Application Experience

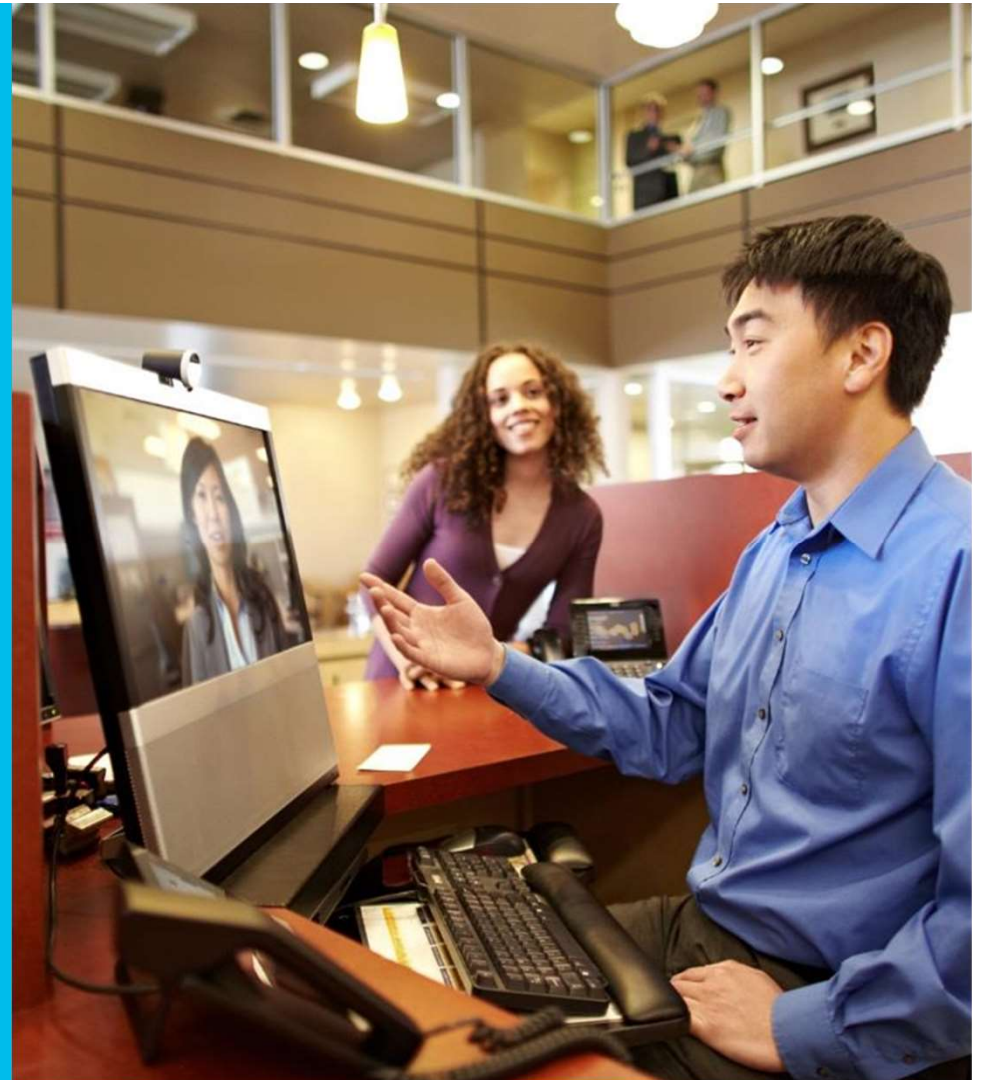
No matter where you applications are hosted Cisco SD-WAN delivers the best user experience, securely across any cloud.

Right Security, Right Place

Protect all users, devices and applications by rapidly deploying cloud security, all on a SASE-enabled architecture

Simplicity at Enterprise Scale

Delivering Intent-based Networking with best of breed technologies across every domain with consistent policy and assurance integration



Next Steps

- [What is SASE](#)
- Read blog on: [Cisco SASE Winner of CRN 2020 Tech Innovators Award](#)
- Visit the [SP News Hub](#)
- Learn more about [Cisco SD-WAN Security](#)
- For more webinars like this one, visit: [Cisco Knowledge Network - Webinars](#)

